



TACONIC LAUNCHES CRISPR GENE EDITING TECHNOLOGY

Hudson, New York - May 28, 2014 – Taconic announced that it has officially launched CRISPR gene editing technology after receiving a license under certain patents from The Broad Institute. The Broad Institute patent represents the first granted patent for use of CRISPR technology in eukaryotic cells and is based on work by Dr. Feng Zhang in a paper published in *Science* in 2013. CRISPR technology promises to revolutionize functional genomics and the license enables Taconic to use the gene editing technology to generate and sell research animal models to its clients.

The decision to choose CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) over other gene editing technologies was based on a thorough review of the scientific literature, consultations with leading biomedical research scientists, and an examination of various gene editing technologies by scientists at Taconic. As the premier global provider of rodent custom model generation services, Taconic plans to use CRISPR technology to speed timelines for clients interested in utilizing custom transgenic rodent models in their biomedical research.

CRISPR gene editing has recently emerged as a versatile technology for inducing precise genetic alterations in a number of different species. First discovered in bacteria and archaea as an immune defense mechanism against invading viruses, the CRISPR system has been rapidly adapted for use as a molecular tool for elucidating gene function. The CRISPR technology involves the use of an RNA complex that includes short RNA sequences, referred to as “RNA guides,” that are bound to the Cas9 enzyme. These RNA sequences target specific locations in the genome. When the RNA guide finds a match, Cas9 then cuts the DNA and the

targeted DNA is thereafter altered. This method is used to either disrupt gene function or introduce genetic modifications such as point mutations.

“Cas9 is revolutionizing many areas of biological research,” said Dr. Zhang, a core member of the Broad Institute and a pioneer of the CRISPR technology. “This technology has a lot of potential and we are excited to work with Taconic as a partner who will use the power of genome editing to generate novel research models,” he added.

Todd Little, President of Taconic, comments on the importance of CRISPR gene editing for Taconic: “CRISPR gene editing technology greatly complements our existing technologies and capabilities to generate custom rodent models for our clients. As the leading global provider of custom rodent models, Taconic seeks new ways to provide clients with cost-effective and timely methods to generate new custom models. After investigating other gene editing technologies, Taconic decided that CRISPR gene editing technology best helps us accomplish those goals on behalf of our clients.”

Taconic began investigating CRISPR technology in early 2013 after scientific publications proved its use for a variety of biomedical research applications. Scientists in Taconic’s Cologne, Germany facility then began pilot studies to test the new technology in mouse models while conducting in-depth comparisons between CRISPR technology and other gene editing technologies. This investigation of CRISPR technology provided excellent results, which has led to Taconic adopting the technology for use on behalf of its client base. Taconic is currently taking orders for gene editing using CRISPR technology.

About Taconic:

Taconic is a global provider of genetically engineered mouse and rat models and services. As a full-service industry leader, founded in 1952, Taconic helps clients acquire, custom generate, breed, test, prepare, and distribute highly relevant research lines worldwide. Headquartered in New York’s Hudson River Valley, Taconic operates six breeding facilities and

three service laboratories in the U.S. and Europe. The company employs over 850 employees committed to technological innovation and customer service excellence. Taconic's products and services are used by over 1,300 companies and academic research institutions in nearly 50 nations worldwide. Find out more: <http://www.taconic.com/CMGS>.

About the Broad Institute of MIT and Harvard:

The Eli and Edythe L. Broad Institute of MIT and Harvard was launched in 2004 to empower this generation of creative scientists to transform medicine. The Broad Institute seeks to describe all the molecular components of life and their connections; discover the molecular basis of major human diseases; develop effective new approaches to diagnostics and therapeutics; and disseminate discoveries, tools, methods, and data openly to the entire scientific community.

Founded by MIT, Harvard, and its affiliated hospitals, and the visionary Los Angeles philanthropists Eli and Edythe L. Broad, the Broad Institute includes faculty, professional staff and students from throughout the MIT and Harvard biomedical research communities and beyond, with collaborations spanning over a hundred private and public institutions in more than 40 countries worldwide. For further information about the Broad Institute, go to <http://www.broadinstitute.org>.